

# Siting Considerations for New and Expanding Marinas

## Environmental Concerns

### Legal Setting

- Critical Area Program
- Environmental Review
- State Tidal Wetlands Regulations
- United States Army Corps of Engineers

### Site Selection Guidelines

- Redevelop Existing Sites
- Characterize Project Site
- Identify Rare and Endangered Species
- Avoid Submerged Aquatic Vegetation
- Minimize Disturbance to Wetlands
- Avoid Shellfish Beds
- Avoid Critical Migration, Nesting, and Spawning Periods
- Avoid Colonial Waterfowl Nesting and Staging Areas
- Avoid Geographic and Hydrographic Impediments
- Consider Bottom Configuration
- Follow Natural Channels

## Information Sources

# Marina Design and Maintenance

## Environmental Concerns

### Best Management Practices for Marina Facilities and Structures

- Use Fixed or Floating Piers to Enhance Water Circulation
- Use Environmentally Neutral Materials
- Limit Shaded Areas Over the Water
- Minimize the Need for Dredging
- Minimize the Impacts of Dredging
- Employ Nonstructural Shore Erosion Control Measures
- Conserve Water
- Maintain Structures Using Clean Marina Practices

### Best Management Practices for Protecting Sensitive Areas

- Minimize Impervious Areas
- Use Upland and Inland Areas
- Expand Upward
- Conserve Sensitive Land
- Practice Water-wise Landscaping
- Adopt Integrated Pest Management Practices

### Best Management Practices for Creating Habitat Areas

- Maintain and/or Develop Vegetated Areas
- Participate in Oyster Restoration Programs

## Information Sources

# Stormwater Management

## Environmental Concerns

## Legal Setting

- General Permit for Discharges from Marinas
- State Law: Sediment Control and Stormwater Management
- Critical Area Program

## Best Management Practices to Control Stormwater Runoff

- Practice Low Impact Development
- Cultivate Vegetated Areas
- Minimize the Amount of Impervious Area
- Use Structural Controls as Necessary
- Control Sediment from Construction Sites
- Stencil Storm Drains

## Information Sources

# Vessel Maintenance and Repair

## Environmental Concerns

### Legal Setting

- General Permit for Discharges from Marinas
- Critical Area Program

## Best Management Practices to Control Pollution from Vessel Maintenance and Repair Activities

- Designate Work Areas
- Contain Dust from Sanding
- Contain Debris from Blasting
- Minimize Impacts of Pressure Washing
- Minimize Impacts of Paints
- Minimize Impacts of Painting Operations
- Reduce Overspray
- Handle Solvents Carefully
- Repair and Maintain Engines with Care
- Winterize Safely
- Conduct In-Water Maintenance Wisely
- Educate Boaters

## Information Sources

# Petroleum Control

## Environmental Concerns

### Legal Setting

- Federal Water Pollution Control Act
- Maryland State Law

### Best Management Practices for Preventing Spills at the Source

- Protect Petroleum Storage Tanks
- Avoid Waves and Wakes
- Maintain Transfer Equipment
- Install Environmental Controls at the Pump
- Supervise Fueling: Environmental Recommendations
- Supervise Fueling: Safety Recommendations
- Turn Down the Pressure
- Advocate the Use of Oil Absorbent Materials
- Provide an Oil/Water Separator
- Offer Spill-Proof Oil Changes
- Minimize Spills and Leaks from Machinery
- Educate Boaters

### Best Management Practices for Emergency Planning

- Prepare a Spill Prevention, Control, and Countermeasure (SPCC) Plan
- Assess Hazards
- Develop Emergency Response Plans
- Make Plans Accessible
- Train Employees
- Share Your Emergency Response Plans
- Maintain Oil Spill Response Equipment
- Store Oil Spill Response Equipment Smartly
- Be Prepared for a Fire
- Maintain Material Safety Data Sheets
- File Tier Two Forms

## Information Sources

# Sewage Handling

## Environmental Concerns

## Legal Setting

- Marine Sanitation Devices
- Pumpout Stations
- No Discharge Zones

## Best Management Practices to Control Sewage

- Install a Pumpout System
- Discourage Discharge from Type I and Type II MSDs at the Slip or Mooring
- Provide Shoreside Restrooms
- Design and Maintain Septic Systems to Protect Water Quality and Public Health
- Provide Facilities for Liveaboards
- Offer MSD Inspections
- Encourage Compliance
- Educate Boaters

## Information Sources

# Waste Containment and Disposal

## Environmental Concerns

## Legal Setting

- Marine Plastic Pollution Research and Control Act
- Resource Conservation and Recovery Act and State Hazardous Waste Laws

## Best Management Practices to Properly Contain and Dispose of Waste

- Reduce Waste
- Control the Disposal of Fish Waste
- Manage Trash
- Recycle Whenever Possible
- Recycle Solid Waste
- Recycle Liquid Waste
- Minimize Your Use of Hazardous Products
- Store Solvents and Hazardous Materials with Care
- Follow Recommended Disposal Methods
- Track Pollution Incidents
- Educate Boaters

## Information Sources

## Pollution Report and Action Log

# Marina Management

## Staff Training

- Stormwater Pollution Prevention Plan
- Emergency Response Plans
- Be Watchful
- Approach Polluters
- Investigate Community College Offerings
- Maintain Training Records

## Inform Patrons and Independent Contractors

- Incorporate Best Management Practices into Contracts
- Post Signs Detailing Best Management Practices
- Distribute Literature to Patrons
- Host a Workshop
- Make Use of Informal Communication Mechanisms
- Recognize Boaters

## Public Relations

- Publicize Your Good Deeds
- Become a Maryland Clean Marina

## Business Practices

- Offer Environmental Audits for Boaters
- Consider Environmental Surcharges
- Be Diligent

## Information Sources



# Laws and Regulations

## Selected Federal Agencies and Their Jurisdictions

- Environmental Protection Agency
- National Oceanic and Atmospheric Administration
- United States Army Corps of Engineers
- United States Coast Guard

## Selected State Agencies and Their Jurisdictions

- Critical Area Commission
- Maryland Department of Natural Resources
- Maryland Department of the Environment
- Maryland Environmental Service
- Maryland Environmental Trust

## Selected Federal Laws that Impact Marinas

- Clean Air Act Amendments, 1990
- Clean Vessel Act
- Coastal Zone Act Reauthorization Amendments of 1990
- Federal Water Pollution Control Act
- Marine Plastic Pollution Research and Control Act
- Oil Pollution Act of 1990
- Organotin Antifoulant Paint Control Act of 1988
- Refuse Act of 1899
- Resource Conservation and Recovery Act

## Selected State Laws that Impact Marinas

- Marine Sanitation Devices
- Pumpout Systems
- Pollutant Discharge Prohibited
- Chesapeake Bay Critical Area Act

## Environmental Permits and Licenses

- General Permit for Discharges from Marinas
- Summary of Environmental Permits and Licenses

## Information Sources

# Bibliography

---

# Clean Boating Tip Sheets

Vessel Cleaning and Maintenance

Selecting a Bottom Paint

Underwater Hull Cleaning

Petroleum Control

Vessel Sewage

Waste Containment and Disposal

# Appendices

- I Information Sources
- II Local Critical Area Commission Contacts
- III BayScapes Program
- IV Recycling Coordinators, Oil/Antifreeze Haulers, and Light Bulb Disposal Sources
- V Sample Contract Language
- VI Spill Response Companies
- VII Local Economic Development Contacts
- VIII Spill Prevention, Control and Countermeasure Plan
- IX Emergency Response Plans
- X Gasoline Haulers
- XI Training Guide: Marina Pollution Prevention Policies
- XII Stormwater Pollution Prevention Plan